UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,306	04/25/2001	David John Benjamin Pearce	CM00620P	6704

7590 05/07/2009

Jonathan P Meyer
Motorola Inc
1303 East Algonquin Road
Schaumburg, IL 60196

EXAMINER	
WOZNIAK, JAMES S	

ART UNIT	PAPER NUMBER
2626	

MAIL DATE	DELIVERY MODE
05/07/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DAVID JOHN BENJAMIN PEARCE and
JON ALASTAIR GIBBS

Appeal 2008-5318
Application 09/830,306
Technology Center 2600

Decided:[1] May 7, 2009

Before KENNETH W. HAIRSTON, CARLA M. KRIVAK, and
KARL D. EASTHOM, *Administrative Patent Judges*.

HAIRSTON, *Administrative Patent Judge*.

DECISION ON APPEAL

---

[1] The two-month time period for filing an appeal or commencing a civil action, as recited in 37 CFR § 1.403, begins to run from the decided dated shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

Appellants appeal under 35 U.S.C. § 134 from a final rejection of claims 1, 3, 4, 6, 7, 11 to 13, 15, 16, 18, 19, and 23 to 26. We have jurisdiction under 35 U.S.C. § 6(b).

We will sustain the obviousness rejections.

Appellants' invention is concerned with mitigating transmission errors in a distributed speech recognition method and system by replacing one or more speech recognition parameters in an identified group of vectors that have a transmission error with corresponding copies of one or more corresponding speech recognition parameters from a different vector (Figs. 1 and 2; Spec. 9 to 11).

Claim 1 is representative of the claims on appeal, and it reads as follows:

1. A method of mitigating errors in a distributed speech recognition process, the distributed speech recognition process being one in which speech recognition parameters are arranged in vectors, each vector corresponding to a particular sampling time-frame, and said speech recognition parameters are received at a second location having been transmitted from a first location;

the method comprising the steps of:

identifying a group comprising one or more of said vectors which have undergone a transmission error; and

replacing one or more speech recognition parameters in the identified group of vectors, wherein said one or more speech recognition parameters in said identified group of vectors are replaced by respective replacement parameters corresponding to copies of one or more corresponding speech recognition parameters from a different vector, corresponding to a different

particular sampling time frame, received without error after said identified group of vectors.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Ozawa	US 5,305,332	Apr. 19, 1994
Jeon	US 5,673,363	Sep. 30, 1997
Yeldener	US 5,774,837	Jun. 30, 1998
Jacobs	US 5,956,683	Sep. 21, 1999

The Examiner rejected claims 1, 3, 13, 15, 25, and 26 under 35 U.S.C. § 103(a) based upon the teachings of Jacobs and Jeon.

The Examiner rejected claims 4 and 16 under 35 U.S.C. § 103(a) based upon the teachings of Jacobs, Jeon, and Ozawa.

The Examiner rejected claims 6, 7, 11, 12, 18, 19, 23, and 24 under 35 U.S.C. § 103(a) based upon the teachings of Jacobs, Jeon, and Yeldener.

Appellants and the Examiner agree that Jacobs does not provide any type of transmission error correction (Br. 6; Ans. 4). Appellants argue *inter alia* (Br. 6 to 8) that the applied references do not teach replacing one or more speech recognition parameters or the entire vector that has undergone a transmission error with copies of one or more corresponding speech recognition parameters.

ISSUE

Have Appellants demonstrated that the Examiner erred by finding that the reference to Jeon teaches replacing one or more speech recognition parameters or the entire vector that has undergone a transmission error with copies of one or more corresponding speech recognition parameters?

FINDINGS OF FACT

1. The transmission error mitigation performed by Appellants replaces speech recognition parameters in a vector (e.g., vector 133) with corresponding speech recognition parameters from a different vector (e.g., vector 134, *see* Fig. 1).

2. Jacobs describes a distributed speech recognition process in which speech recognition parameters are arranged in vectors, and each vector corresponds to a particular sampling time frame (Fig. 2; Abstract; col. 1, ll. 22 to 29).

3. In the preferred embodiment of Jeon, an error in a segment of a frame is concealed by taking an adjacent segment from another frame and multiplying the adjacent segment by a weight value to obtain a coefficient for the erroneous segment (Fig. 6A; col. 4, l. 62 to col. 5, l. 18).

4. In the admitted prior art of Jeon, a frame with erroneous segment(s) is replaced *in toto* with the contents of a buffered error-free frame (Figs. 3 and 4A; col. 1, ll. 5 to 12; col. 1, l. 59 to col. 2, l. 31).

PRINCIPLES OF LAW

"[I]f a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill." *KSR Int'l Co. v. Teleflex Inc.,* 550 U.S. 398, 417 (2007).

ANALYSIS

Claims 1, 13, 25, and 26

Inasmuch as the preferred embodiment in Jeon conceals an error in a segment of a frame by taking an adjacent segment from another frame and

multiplying the adjacent segment by a weight value to obtain a coefficient for the erroneous segment, we agree with Appellants' argument that such an error concealment technique does not teach replacing one or more speech recognition parameters or the entire vector that has undergone a transmission error with *copies* of one or more *corresponding* speech recognition parameters. As seen in Figure 6A of the preferred embodiment in Jeon (FF3), the adjacent segment S_m from frame F_1 is not a *corresponding copy* of erroneous segment S_1 from frame F_2. On the other hand, the admitted prior art in Figures 3 and 4A of Jeon (FF4) describes the replacement *in toto* of a frame F_2 with erroneous segment(s) with another frame from buffer 40. Thus, the admitted prior art portion of Jeon teaches replacing one or more speech recognition parameters or the *entire* vector that has undergone a transmission error with *copies of one or more corresponding* speech recognition parameters as set forth in claims 1, 13, 25, and 26 on appeal. In the absence of other arguments by Appellants, we find that it would have been manifestly obvious to one of ordinary skill in the art to use the error mitigation technique described by the admitted prior art in Jeon to improve the distributed speech recognition process described by Jacobs (FF2). *See KSR*, 550 U.S. at 417.

Claims 3 and 15

Appellants' arguments (Br. 8) for claims 3 and 15 mirror the arguments presented for claims 1, 13, 25, and 26. Accordingly, Appellants' arguments do not demonstrate the nonobviousness of the claimed subject matter set forth in these claims.

Claims 4 and 16

Appellants have chosen to let these claims stand or fall with claims 3 and 15 (Br. 9). As indicated *supra*, Appellants' arguments were not convincing of the nonobviousness of the claimed subject matter set forth in claims 3 and 15.

Claims 6, 7, 18, and 19

Appellants have chosen to let these claims stand or fall with claims 1 and 13 (Br. 9). As indicated *supra*, Appellants' argument were not convincing of the nonobviousness of the claimed subject matter set forth in claims 1 and 13.

Claims 11, 12, 23, and 24

Appellants' arguments (Br. 9) fail to address the Examiner's contention that it would have been obvious to the skilled artisan to apply the teachings of Yeldener to the teachings of Jacobs and Jeon. Accordingly, Appellants' arguments do not overcome the Examiner's prima facie case of obviousness.

CONCLUSION OF LAW

Appellants have not demonstrated that the Examiner erred by finding that the applied references teach replacing one or more speech recognition parameters or the entire vector that has undergone a transmission error with copies of one or more corresponding speech recognition parameters.

ORDER

The Examiner's obviousness rejections of claims 1, 3, 4, 6, 7, 11 to 13, 15, 16, 18, 19, and 23 to 26 are affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

AFFIRMED

ELD

JONATHAN P MEYER
MOTOROLA INC
1303 EAST ALGONQUIN ROAD
SCHAUMBURG, IL 60196